

Work Order ID 46187

June 26, 2009 11:50:11 AM



Page 1

Item ID: D3572-041

Accept



Setup Start



Revision ID: A

Stop



Item Name: Guide Assembly

Start Date: 15/07/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3572

Rev A

100

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

SEE ATTACHED w/o

110

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

1-Cut Tube D3572-1 as per Dwg D3572-12-deburr both ends



120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control



Check this

Work Order ID 46187

June 26, 2009 11:50:11 AM



Page 2

Item ID: D3572-041
Revision ID: A
Item Name: Guide Assembly

Accept



Setup Start



Stop



Start Date: 15/07/2009 Start Qty: 4.00

Required Date: 03/08/2009 Req'd Qty: 4.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Large Fab

Large Fab

0.00

Memo

0.00

LARGE FABRICATION RESOURCE 1011-Weld D3572-3 guides and D3572-5
bracket as per Dwg D3572-1A/R AL ROD
Batch: _____



140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

27 Sep 09.01



150



QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

0.00

Memo

0.00

PD

09.09.01

Work Order ID 46187

June 26, 2009 11:50:11 AM



Page 3 ~

Item ID: D3572-041

Accept



Setup Start



Revision ID: A

Item Name: Guide Assembly

Stop



Start Date: 15/07/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

0.00



Small Fab

Small Fab

Memo

0.00

Small Fab

1 - grind weld flush at the end of tube only



170

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

=> See 102101



180

0.00



Chemical Conversion Coat per QSI005 4.1

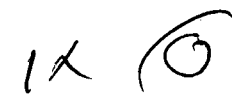
HandFinish

Memo

0.00

Hand Finishing

JH 09/09/01



Work Order ID 46187

June 26, 2009 11:50:11 AM



Page 4

Item ID: D3572-041
Revision ID: A
Item Name: Guide Assembly

Accept



Setup Start



Stop



Start Date: 15/07/2009 Start Qty: 4.00
Required Date: 03/08/2009 Req'd Qty: 4.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:
QC: Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 Memo M109091 START TIME: 2:00pm 2:30pm FINISH TIME: 3:20pm	0.00 0.00							⇒ M10909102 (X1) 0
200 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							G.M 07-09-02 0
210 Packaging Packaging	Identify as per dwg & Stock Location: 260 Memo	0.00 0.00							P29/8/14 (1)

Work Order ID 46187

June 26, 2009 11:50:11 AM



Page 5

Item ID: D3572-041
Revision ID: A
Item Name: Guide Assembly

Accept



Setup Start



Stop



Start Date: 15/07/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:
QC: Date: SPC (Y/N): Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

09/09/08
mf
09-09-04

June 26, 2009 11:28:58 AM

Work Order ID: 46187

Parent Item: D3572-041RevA

Parent Item Name: Guide Assembly




Comments:

Start Date: 15/07/2009

Required Date: 03/08/2009

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
✓ D3572-3RevD 		Manufactured	No				Each	0.0000	16.0000			
Guide ✓ D3572-5RevD 		Manufactured	No				Each	0.0000	4.0000			
Bracket ✓ M6061T6T1.000W.188  6061T6 RD TUBE 1.00 X .188W		Purchased	No				f	0.0000	9.3647			

Date: Monday, 02/03/2009 11:25:29 AM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 46187
 Estimate Number : 12709
 P.O. Number :
 This Issue : 02/03/2009 S.O. No. :
 Prsht Rev. : NC
 First Issue : / / Type : LARGE FAB ASSY
 Previous Run : 44664

Drawing Name : GUIDE ASSEMBLY

Part Number : D3572041
 Drawing Number : D3572 REV.C
 Project Number : N/A
 Drawing Revision : C
 Material :
 Due Date : 20/03/2009

Qty: 1/2 MF Um: Each

Written By :

Checked & Approved By :

Comment :

Est Rev:A New Issue 07-02-07 JLM
 est rev B revB dwg EC
 Est Rev:C Removed D3572-7 Cap 07-06-11 JLM
 Est Rev:D 08-05-27 Review process of Est. DD verified by:
 EC
 Est Rev: E 09-02-20 Steps 8-10 re-arranged KJ Verified by:

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

2.0

D35723

Guide



Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

GUIDE

Batch: B47804

= 4x

SP

09.05.21

3.0

D35725

Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

BRACKET

Batch: B32415

= 4x

SP

09.05.22

4.0

M6061T6T1000W188

6061T6 RD TUBE 1.00 X .188W



Comment: Qty.: 2.3405 f(s)/Unit Total : 9.3618 f(s)

6061-T6 Round Tube 1.00"x 0.188 wall

Batch: M109041

SP 09.05.22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 02/03/2009 11:25:29 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GUIDE ASSEMBLY

Job Number: 46187

Part Number: D3572041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
1-Cut Tube D3572-1 as per Dwg D3572
2-deburr both ends

SP 09.05.22 (IX)

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SP 09.05.22 (XU)

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1
1-Weld D3572-3 guides and D3572-5 bracket as per Dwg D3572
A/R AL ROD Batch: 4104855

SP 09.05.22

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
1- grind weld flush at the end of tube only

SP 09.08.31

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

SP 09.09.01

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SP 09/09/01 (XU)

11.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
Chemical Conversion Coat as per QSI 005 4.1

12.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING
Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME: _____

OVEN TEMPERATURE: _____

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 02/03/2009 11:25:29 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GUIDE ASSEMBLY

Job Number: 46187

Part Number: D3572041

Job Number:



Seq. #:

Machine Or Operation:

Description :

FINISH TIME: _____

13.0 ✓

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

14.0 ✓

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

15.0 ✓

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion ✓



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

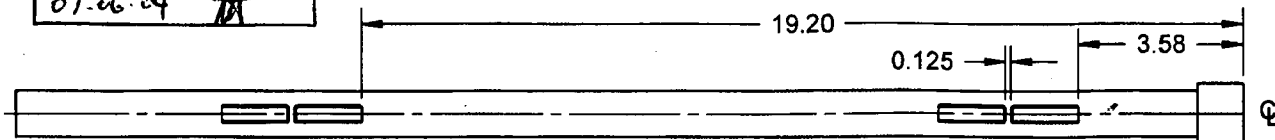
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>LE</i>	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>B</i>	APPROVED <i>#</i>	DRAWING NO. D3572	REV. C SHEET 1 OF 2
DATE 07.06.01	TITLE GUIDE ASSEMBLY		SCALE 1:4
REV	DATE	DESCRIPTION	
A	07.03.29	NEW ISSUE	
B	07.04.20	FOR D3573-3 0.03 CHMF WAS 0.06; ADD TYP TO FILLET	
C	07.06.01	REMOVE D3572-7	

RELEASED07-06-04 *#*D3572-3 GUIDE
(4 PLACES)

3/16

4X

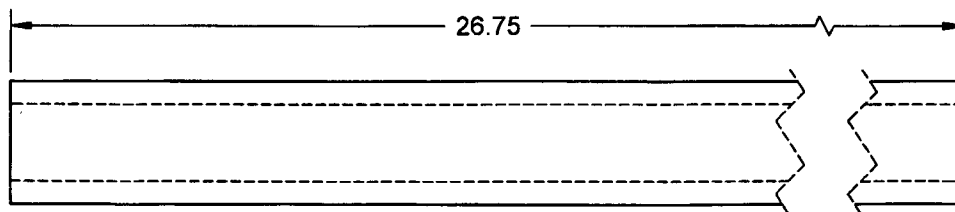
D3572-1 TUBE

D3572-041 GUIDE ASSEMBLY

D3572-5 BRACKET

D3572-041 NOTES:

- 1) PART IS SYMMETRIC ABOUT CENTERLINE
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) IDENTIFY WITH DART P/N "D3572-041" USING FINE POINT PERMANENT INK MARKER
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 6) WELD PER DART QSI 004

**D3572-1 TUBE**

0.188 (REF)

Ø 1.000 (REF)

D3572-1 NOTES:

- 1) MATERIAL: 6061-T6 (OR T62) ALUMINUM TUBE 1.00 OD X 0.188 WALL
PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A-225/8 UNCONTROLLED COPY
(REF DART SPEC M6061T6T1.000W.188)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX

SUBJECT TO AMENDMENT

WITHOUT NOTICE

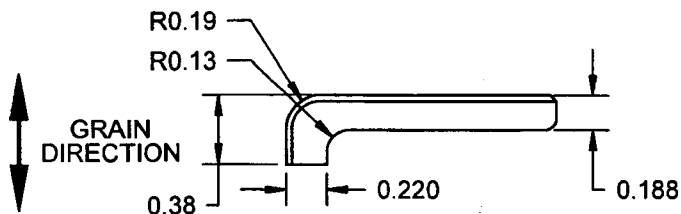
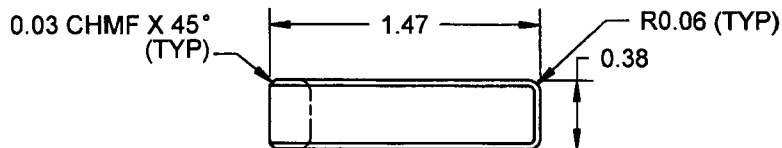
WORK ORDER

NO. *146021***COPYRIGHT © 2007 BY DART AEROSPACE LTD**

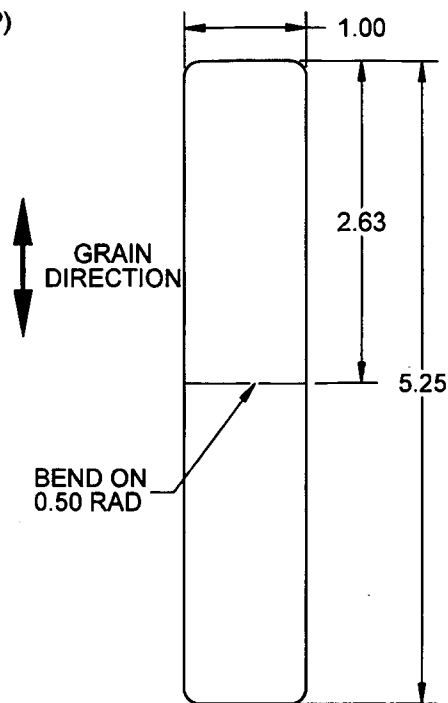
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



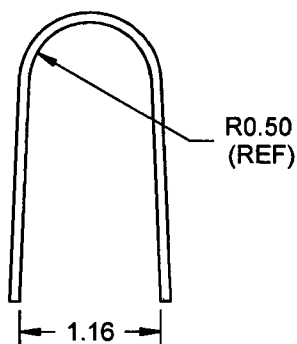
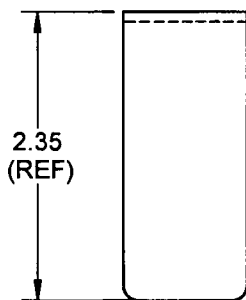
DESIGN <i>LE</i>	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>B</i>	APPROVED <i>H</i>	DRAWING NO. D3572	REV. C SHEET 2 OF 2
DATE 07.06.01		TITLE GUIDE ASSEMBLY	SCALE 2:3



1 D3572-3 GUIDE



2 D3572-5F FLAT PATTERN



**D3572-5 BRACKET
(MAKE FROM D3572-5F)**

RELEASED

07.06.01 *H*

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *46187*

D3572-3/-5 NOTES:

- 1) D3572-3 MATERIAL: 6061-T6 (OR T651/T6510/T651/T62) ALUMINUM BAR
PER QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR QQ-A-200/8 (OR AMS 4160) (REF DART SPEC M6061T6B)
- 2) D3572-5 MATERIAL: 6061-T6 (OR T62) ALUMINUM SHEET 0.080 THICK PER QQ-A-250/11
OR AMS 4025 OR 4027 (REF DART SPEC M6061T6S.080)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX

COPYRIGHT © 2007 BY DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED
OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.